

CONTACT LENS HAVING A UNIFORM HORIZONTAL THICKNESS
PROFILE

Abstract of the Disclosure

A contact lens having a rotational stabilization mechanism thereon, such as prism ballast, and a thickness profile that reduces the torque imparted on the lens by the action of the eyelids, especially for stabilizing toric lenses. The prism ballast is provided on one or more portions of the anterior face of the lens such that the lens body has a uniform thickness of within 10% along horizontal cross-sections. The anterior face of the lens may be segregated into a peripheral zone, an inner zone circumscribed by the peripheral zone, and a central optic zone. The prism ballast portion is provided within the inner zone, which may be further subdivided into a superior portion, an intermediate portion proximate the optic zone, and an inferior portion. The ballast portion increases in thickness along a superior-inferior line parallel to a vertical meridian, and has a substantially uniform thickness perpendicular thereto. The peripheral zone may be tapered, and have a rounded edge. The rate of thickness change across any portion of the peripheral zone is less than about 250 $\mu\text{m}/\text{mm}$.